



A U.S. Department of Defense Information Analysis Center (IAC) sponsored by the Defense Technical Information Center (DTIC)

Major General George Friel Presents "Vision of the Future" for CBDCOM

By Mary Jo Waters



Major General George E. Friel is the Commanding General of the U.S. Army Chemical and Biological Defense Command (CBDCOM), headquartered at the Edgewood Area of Aberdeen Proving Ground, Maryland. He assumed command of its predecessor organization, the U.S. Army Chemical and Biological Defense Agency on October 1, 1992. He also serves as Deputy Chief of Staff for Chemical and Biological Matters of the Army Materiel Command, Alexandria, Virginia.

Major General George Friel has made presentations at ADPA meetings and symposiums as well as hosted Town Hall meetings at CBDCOM to explain the changes in NBC defense programs, policies and processes occurring as a result of Public Law 103-160 the National Defense Authorization Act for FY 1994 (Title XVII). The recurrent theme of each presentation was that the Department of Defense must develop a new way of doing business at every level.

In the Winter issue of the CBIAC Newsletter, the cover story, Dr. Prociv Speaks on the Continually Changing CB Landscape,

discusses the impact of the National Defense Authorization Act for FY 1994 along with the February 1993 Browder Report. The National Defense Authorization Act contains provisions for combining all of the chemical and biological (CB) programs under one DoD budget line with the Army as the executive agent.

At the February 15, 1995 American Defense Preparedness Association (ADPA) luncheon held at the Edgewood Community Center, Aberdeen Proving Ground (APG), Maryland, MG Friel spoke on The Future of CBDCOM, highlighting areas of significant change in the Department of Defense Research and Development (R&D) Acquisition and Procurement policy and the role CBDCOM has in the new process.

MG Friel presented an overview of the changes occurring in management and the impact these changes are having in the area of acquisition and procurement. With less taxpayer dollars available, rapidly changing mission requirements and restructuring of the government from within as joint service efforts become the way of the future, CBDCOM now has a critical role in the area of CB defense R&D acquisition and procurement. In this presentation, MG Friel emphasized that the key to the new way of doing business will be efforts to move quickly to train and certify our industrial partners through the "CP2/ISO 9000" program.

Contractors will be encouraged to obtain certification as a Best Value Contractor through a Contractor Performance Certification Program. "Our quality vision," said MG Friel, "is to manage the business processes so they are streamlined, perfor-

mance driven efforts that produce a quality product we can guarantee will protect our warriors." MG Friel concluded the February 15th presentation with the "Shadow Triangle Concept," an approach where Government and industry work as a team committed to common goals.

On March 16, 1995, MG Friel hosted a Joint Service Materiel Group (JSMG) Town Hall Meeting, held at the CBDCOM Conference Center, Aberdeen Proving Ground, Maryland, to explain to CBDCOM employees "the process and structure established to effect management and oversight of the Joint Service NBC Defense Program" as well as his role and responsibilities as the chairman of the JSMG and those of his "purple" Executive Office, formerly known as the Chemical and Biological RDA Office.

See Major General George Friel Presents...

Continued On Page 4

On the Inside

2 Ongoing and Recent Activities

3 TAT Focus

4 Technology Transfer

5 CB News Excerpts

6 Calendar of Events

9 CB R&D Activities

10 Selected Technical Responses

11 Contract Awards

ONGOING AND RECENT ACTIVITIES

Current Awareness

• Mr. Francis Crimmins, Ms. Nancy Brletich, Mr. Don McGonigle and Mr. Steven Jones attended the Advance Planning Briefing for Industry (APBI) on the Chemical Biological Mission Area hosted by the U.S. Army Chemical and Biological Defense Command on March 29-30, 1995, in Laurel, Maryland. The CBIAC display was featured at this briefing.

• The Modeling and Simulation Team, Research and Technology Directorate of the Edgewood Research, Development and Engineering Center (ERDEC), Aberdeen Proving Ground, Maryland held an open house on February 15, 1995. Mr. Don McGonigle and Ms. Nancy Brletich observed the demonstration of their latest chemical and biological Distributed Interactive Simulation (DIS) facilities and capabilities.

• The CBIAC as a Resource for Simulant Data was the topic of the briefing given by Ms. Nancy Brletich at the 9th International Simulant Workshop held March 7-8, 1995, at the Richlin Ballroom in Edgewood, Maryland. The U.S. Army Edgewood Research, Development and Engineering Center (ERDEC) sponsored the conference which was coordinated by the CBIAC.

Information Acquisition and Processing

• Documents in the areas of equipment survivability, materials testing, environmental clean-up of CB weapons storage sites, individual protection, collective protection, and detection were added to the CBIAC collection during the second quarter, FY 95.

Inquiry and Referral Services

• Last quarter the CBIAC received 262 inquiries. Over 20% of the inquiries for last quarter were related to specific documents while more than 15% of the questions asked were in the area of NBC Survivability. Shown in the diagram are the percentages

for inquiries and referrals posed by various agencies for second quarter, FY 95.

Products

• For the title, price and distribution limitation of the most recent CBIAC products, see our Products List included in this issue of the CBIAC Newsletter.

Technical Area Tasks (TATs)

• Since the last newsletter, 17 TATs have been awarded and effort was added to five ongoing tasks. As of 31 March, 22 TATs have been awarded and work has been added to five tasks. Total value of TATs awarded under our new contract is over 5.3 million dollars. Nine TATs have been completed under the new contract.

• Do not hesitate to contact Judi Shetterly at the CBIAC (410) 676-9030 if you would like further information on a CBIAC TAT. In order for us to help you most efficiently, please furnish the Government contract number you are working on (if any), the reason(s) you want the information and your company address and phone number. We need this information in order to obtain release of information from the TAT sponsor.

Completed:

Task Description/Sponsor

354 Provide Integrated Logistics Planning and Analyses for USN CBR Defense Systems.
USN/NAVSEA

369 Evaluate Test Methods Used to

Determine Chemical Resistance of CBW Materials.

USA/ERDEC

453 Evaluate the Ability of Pulsed Power (Corona Discharge) to Neutralize Chemical Agents.
USN/NSWC

468 Evaluate and Analyze Technology, Product and Process Applications, Documentation, Systems Development, etc. for Application to the USN CBR-D Program.
USN/NAVSEA

515 Evaluate the Air Flow Characteristics of Modular Collective Protection Equipment (MCPE) Gas Particulate Filter Units Used in Collective Protection Applications.
USN/NSWC

Underway:

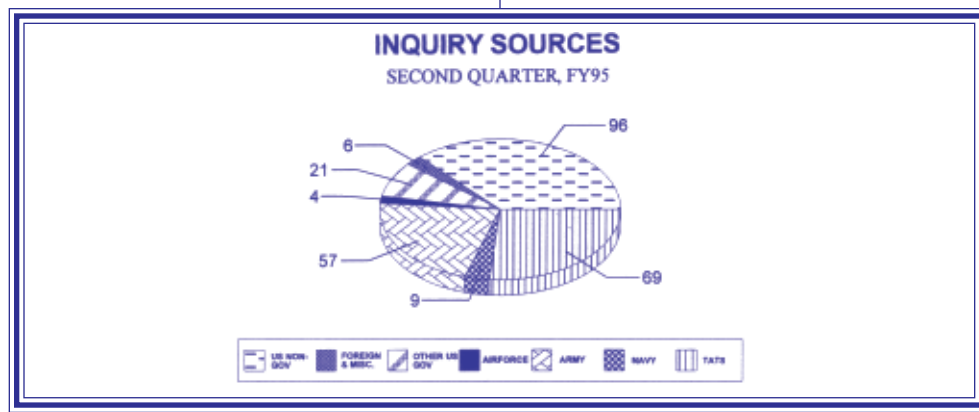
Task Description/Sponsor

2 Evaluate the Aerosol Protection Provided by Candidate JSLIST Garment Designs and Fire Fighters Ensembles.
USAF/HSC

8 Evaluate USN CBR-D Systems Logistics and Acquisition Strategies, Milestone and T&E Reviews, Technology Planning and Development.
USN/NAVSEA

See Ongoing and Recent Activities

Continued On Page 9



TAT FOCUS

MEDTAG

Improved Documentation of Emergency Care for Battlefield Casualties

One of the primary challenges in treatment of battlefield casualties is the timely and accurate communication of information about the injury. When confronting a battlefield injury, today's policy dictates that the corpsman or medic must complete a written field medical card identifying the soldier, the injury and the treatment administered. This hand-written information is then carried back to the battalion aid station or MASH unit to assist in more comprehensive treatment. In most cases, however, the tactical combat situation and/or environmental conditions prevent documentation by the field medic. This lack of injury care information introduces risk to the continuity of the combatant's care.

To address this problem, the U.S. Naval Health Research Center has worked with Battelle to investigate a concept involving an electronic data storage device known as "MEDTAG" that could replace the field medical card. The work has been accomplished through a series of CBIAC Technical Area Tasks (TATs) over the past five years, most recently under TAT 470. The MEDTAG is an electronic device which can be used to enter and review battlefield medical treatment information. The MEDTAG uses the DoD Joint Staff prototype Multi-technology Automated Reader Card (MARC) to store and retrieve the treatment information. The MARC is a smart card that would be carried by each soldier and contain the soldier's identification and vital health history information. Upon injury, a medical care provider would insert the patient's MARC into the MEDTAG, then use the menus provided on the integral display, along with a simple two button interface, to quickly document and review the treatment provided. After treatment, the MARC would be removed from the MEDTAG and travel with the soldier as he moves to more comprehensive care centers, and the information stored in the MARC by MEDTAG helps to enhance the quality of care received.

The MEDTAG would be especially useful for treatment of casualties in the Chemical Biological Warfare (CBW) environment. For instance, if a soldier is exposed to a chemical agent and is treated using atropine injectors, the MEDTAG allows the treatment provider to quickly indicate how many injectors were administered and records the date and time of treatment. This information can be reviewed by other treatment providers prior to administering further treatment in order to prevent over medicating the patient.

Some enhancements that are being considered for the MEDTAG include using combination of voice input, speech output, and possibly physiological sensing to augment the display and two input button interfaces currently used by the MEDTAG. The primary advantage to the enhanced hands free interfaces would be to allow the corpsman or medic to document as the treatment is provided instead of after the treatment in order to reduce the total treatment and documentation time. Also, the hands free approach would be useful in the CBW and cold environments where gloves and masks would be worn. Throughout the evaluation of the MEDTAG concept, the operability of the device by individuals in CB protective clothing has been considered.

For additional information, contact Clark Fortney, Battelle Columbus Operations, (614) 424-3706 (tel) or (614) 424-7400 (fax).



The most recent MEDTAG prototype

Editorials Welcomed!

If you would like to submit an editorial for publication in our next issue of the CBIAC Newsletter, please contact Mary Jo Waters, at the CBIAC. For those interested in submitting editorials, we ask that you provide us with an electronic copy as well as a hard copy of your editorial.

SUBWAY INCIDENT LINKED TO CHEMICAL WEAPONS

The Baltimore Sun reported that a toxin incident occurred during peak traffic time on the morning of March 20th at the Tsukijiki subway line in central Japan. As many as 15 to 26 different stations reported strong acidic fumes and were closed for the day. Six people died, at least ten were comatose, and over 850 others were hospitalized with nausea, nosebleeds, headaches, and blurred vision. The toxin which caused these recent tragedies is believed to be Sarin, a volatile nerve gas developed in the 1930's. Reports by other commuters indicated that a man placed the boxes on an overhead rack in the train and exited at the next stop. Two other toxic gas incidents were recently reported in the same region; one last year, also involving Sarin, near the Matsumoto subway station and one earlier this month at the Keihin Kyoko station. They are not linked by Tokyo police investigators.

TECHNOLOGY TRANSFER

This column will serve the CB community by showcasing new technologies, communicating industry needs and providing sources of additional technology transfer information. The CBIAC Newsletter invites written submissions from its readers for upcoming newsletters. Please submit copy to the attention of Mr. Don McGonigle.

This issue will cover several points of contact and information available for industry as part of the technology transfer process. Subsequent editions will discuss issues confronting successful transfer strategies and CB technologies available for commercialization.

One of the keys to technology transfer is industry knowing what technology or capabilities are available in the Federal Government. Two national centers have been established to provide industry access to Federal Research and Development (R&D) technology: The Federal Laboratory Consortium (FLC) and the National Technology Transfer Center (NTTC).

The FLC [(206) 683-1005] is a volunteer network of representatives from over 600 Government R&D laboratories in 16 federal agencies. The FLC provides the following mechanisms to gain access to the expertise and technologies of the federal laboratory system:

- Sharing Information
- Exchanging Personnel
- Finding Technical Assistance
- Using Federal Laboratory Facilities & Capabilities
- Licensing Patents and Technical Know-How
- Acquiring Software
- Performing Cooperative R&D
- Using Cooperative R&D Agreements (CRDAs)
- Forming Consortia
- Technology Developed Under Government Contracts

The NTTC [(800) 678-6882] also provides mechanisms similar to the FLC but is funded by NASA to provide an information gateway to American business. In addition to its toll free number, the NTTC provides free access to an electronic bulletin board, NTTC Online [(304) 243-2560]. The BBS provides access to the following databases and resources:

- The Directory of Federal Laboratories
- Federal Technology Available for Licensing
- SBIR Solicitations
- NTTC News Board featuring: News and Announcements, E-mail, Events Calendar and Publications List.

The CBIAC is working to develop Government technology transfer contacts specific to the CB technology area. We plan to provide this list in upcoming issues of this newsletter.

THE PENTAGON SPEAKS

In cooperation with the Office of the Assistant to the Secretary of Defense (Chemical and Biological Matters), the CBIAC will be introducing a new column entitled The Pentagon Speaks, in upcoming issues of the CBIAC newsletter. This column will afford readers an excellent opportunity to pose questions pertaining to CB defense issues to the Pentagon, through the CBIAC. We urge you to please take advantage of this opportunity by submitting your questions in writing to the attention of Nancy Brletich via mail, electronic mail or facsimile by the deadlines indicated below:

Winter Issue	November 1
Spring Issue	February 1
Summer Issue	May 1
Fall Issue	August 1

Major General George Friel Presents...

Continued From Page 1

The JSMG became operational on January 26, 1995. All NBC Defense programs are now joint efforts funded in accordance with Joint Service priorities and warfighting principles. The JSMG coordinates the Services' NBC defense science and technology, development and acquisition and logistics readiness and sustainment. The JSMG is chaired by MG Friel as the Deputy Chief of Staff for Chemical and Biological Matters, Army Materiel Command on behalf of the Commander, Army Materiel Command.

At the Town Hall meeting, MG Friel also pointed out that Joint Service teamwork is required to maintain program balance, thus providing meaningful products to military personnel in every branch of service. Team support from CBDCOM and other materiel developers to the JSMG Executive Office was noted as essential to the successful management of Joint programs.

On March 29-30, 1995, at the Advance Planning Briefing for Industry on the Chemical/Biological Mission Area, sponsored by the U.S. Army CBDCOM, coordinated by the ADPA and held at the Applied Physics Laboratory, Johns Hopkins University, in Laurel, Maryland, MG Friel provided an Overview of the CB Mission Area. He once again presented the policy and program changes occurring as a result of The National Defense Authorization Act of FY 1994, emphasizing the changes in acquisition and procurement and thus, its impact on the relationship between Government and industry.

These overviews to both Government and industry employees were intended to show that efforts at every level are intended to produce quality products from cost-effective, efficient processes and programs.



CB NEWS EXCERPTS

In order for the CBIAC to inform its readers of recent Chemical/Biological Defense activity throughout the United States and around the world, we have compiled a list of related CB news articles and have taken excerpts from them to create brief overviews. Please note that the CBIAC does not provide secondary distribution of articles. We can; however, provide direction on where to find an article of interest.

Coia, David Allen. Superpower Scientists Plan Chemical Arms' End, *The Washington Times*, 1994 December 13. A treaty to end production of chemical weapons and mandate their destruction awaits ratification in the U.S. Senate while Russia and the United States work to eliminate their huge chemical weapons stockpile.

Grier, Peter. Tax Cuts Imperil Drive to Clean U.S. Weapon Sites, *The Christian Science Monitor*, 1994 December 23. The Department of Energy's cleanup fund is threatened to be reduced by the Clinton administration.

Ember, Lois. Facility Contains Chemical Arms Blast, *Chemical & Engineering News*, 1994 December 12. An explosion at the Army's Chemical Stockpile Disposal Center facility on Johnston Atoll in the Pacific Ocean occurred on November 19, 1994. No traces of nerve agent were detected and no workers were harmed.

India Denies Role in Toxic Gas, *The Washington Times*, 1995 February 2. The Indian Foreign Ministry refutes a report written by *The Washington Times* stating that three Indian companies were helping Iran build a secret poison gas complex.

Toups, Catherine. U.S., Russia Slow to Destroy Chemical Weapons After Vow, *The Washington Times*, 1995 January

31. Only 21 countries live up to their promise two years after a treaty to ban and destroy all chemical weapons was signed by almost 161 nations of the world.

World War II Poison Gas Program Haunts Japan, *The Baltimore Sun*, 1995 January 29. The extent of Japan's poisonous gas production before and during WW II is still unknown along with the number of chemical shells decaying in northern China.

Hargrove, Thomas. Army Probing Possible Chemical-Arms Glitch, *The Washington Times*, 1995 January 18. The Army has ordered laboratory tests to determine whether some of the nation's aging stockpile of 400,000 chemical weapons carrying rockets might spontaneously detonate.

Chemical Weapons Alleged to Leak, *The Baltimore Sun*, 1995 January 17. Leaking chemicals pose a significant hazard over the next decade and the Army must develop an emergency plan for disposing of rockets with chemical warheads, according to a recent congressional report.

Chemical Weapons Convention Signatories/Ratifiers, U.S. Arms Control and Disarmament Agency, 1995 February 14. As of February 9, 1995, 159 countries have signed the CWC, of which 24 have ratified, including Albania, Armenia, Australia, Bulgaria, Cook Islands, Finland, France, Germany, Greece, Lesotho, Maldives, Mauritius, Mexico, Mongolia, Norway, Oman, Paraguay, Seychelles, Spain, Sri Lanka, Sweden, Tajikistan, Turkmenistan and Uruguay. The CWC is a treaty to ban the development, production, acquisition, stockpiling, retention and direct or indirect transfer of chemical weapons.

Reid, Bruce. Army Set to Battle Munitions Dump, *The Baltimore Sun*, 1995 January 30. The Army is designing a cap to cover a 4.5-acre munitions dump with sand and other material for the Aberdeen Proving Ground's O-Field dump in Aberdeen, MD. The Old O-Field dump began exploding and spewing military poisons 50 years ago.

Rocket Detonates at JACADS, Chemical Demilitarization Update, 1995 February.

U.S. Army investigators believe explosive material caught on a shearing blade was the most probable cause for an M55 rocket detonation during processing at the Johnston Atoll Chemical Agent Disposal System (JACADS) on November 19, 1995.

Adams, James. South Africa: Libya Said Seeking Secret Biological Weapons, *The Sunday Times*, 1995 February 26. Libyan President Colonel Mu'ammarr al Qadhafi is trying to recruit South African scientists who developed biological weapons that were used to assassinate opponents of South Africa's apartheid regime.

Chemical Shipment to Iraq Intercepted, *The Washington Times*, 1995 January 26. German and Saudi agents raided the freighter *Asian Senator* (Hamburg registered) and seized chemicals intended for rocket fuel production by Iraq.

Safire, William. Iraq's Threat: Biological Warfare, *The New York Times*, 1995 February 16. Iraq has been gearing up for biological agent production. Thirty quarts of cultures of cholera, tuberculosis and plague bacteria have been found in the last two months as well as necessary fermentors, lyophilizers for freeze-drying and centrifuges for bacterial separations.

Maria Delgado, Antonio. Ecuador General says Peru Using Chemical Weapons, *Reuter*, 1995 February 10. The General accused Peruvians of drugging their own troops with cocoa leaves in order to keep them on the offense and of using chemical weapons on Ecuador's troops.

ERRATA

In the last issue of the CBIAC newsletter, we erroneously reported that MG Robert Orton was retiring. We have since learned that he has moved to TRADOC in the position of Deputy Chief of Staff for Base Operations Support. We apologize for any confusion that this may have caused.

CALENDAR OF EVENTS

The CBIAC highlights conferences, symposia, meetings, exhibitions and workshops of interest to the CB community in every issue of our newsletter. We invite CBIAC users to submit information on various events to the attention of Nancy Brletich. She may be reached at the address, phone and fax numbers on the back page of this newsletter, or via the internet: brletich@battelle.org. Due to space limitations, the CBIAC will accept submissions on a first-come, first-served basis and reserves the right to reject submissions.

1995 MEETINGS

<i>Date/Name/Location</i>	<i>Contact(s)</i>	<i>Date/Name/Location</i>	<i>Contact(s)</i>
Apr 24-26, 1995		May 16-17, 1995	
Ship Self-Defense	TTC Seminars Attn: Alan Friedman	DTIC Regional Conference	DTIC Attn: Ms. Patti Miller
World Exchange Plaza Conference Centre Ottawa, Ontario CANADA	Dept. NSD P.O. Box 3608 Torrance, CA 90510-3608 Tel: (310) 534-2560	Massachusetts Institute of Technology Lincoln Laboratory Lexington, MA	Cameron Station Alexandria, VA 22304-6145 Tel: (703) 274-3848 DSN: 284-3848 E-mail: pmiller@dgis.dtic.dla.mil
Apr 24-28, 1995		May 20-25, 1995	
Technology Review and Update for Technical Personnel	Space Systems Academic Group Naval Postgraduate School 777 Dryer Road, Rm 200 Monterey, CA 93943-5110 Tel: (408) 656-2984 Fax: (408) 656-2816 DSN: 878-2984	Ninth International Bio- Technology Meeting & Exhibition	Space Systems Academic Group Nabal Postgraduate School 777 Dryer Road, Rm 200 Monterey, CA 93943-5110 Tel: (408) 656-2984 Fax: (408) 656-2816 DSN: 878-2984
Naval Postgraduate School Monterey, CA		Naval Postgraduate School Monterey, CA	
Apr 25-26, 1995		June 5-9, 1995	
DTIC Regional Conference	DTIC Attn: Ms. Patti Miller	Defense Systems Acquisition Management	American Defense Preparedness Association (ADPA) Attn: Terri Colvin
IIT Research Institue Chicago, IL	Cameron Station Alexandria, VA 22304-6145 Tel: (703) 274-3848 DSN: 284-3848 E-Mail: pmiller@dgis.dtic.dla.mil	Tampa, FL	2101 Wilson Blvd., Suite 400 Arlington, VA 22201-3061 Tel: (703) 247-2571 Fax: (703) 522-1885
Apr 25-27, 1995		June 6-8, 1995	
International Training and Equipment Conference and Exhibition - ITEC '95	ITEC Nelson Jackson Two Colonial Place Suite 400, 2101 Wilson Blvd. Arlington, VA 22201-3061 Tel: (703) 522-1820 Fax: (703) 522-1885	63rd MORS Symposium	Military Operations Research Society, Inc. (MORS) 101 S. Whiring Street, #202 Alexandria, VA 22304-3483 Tel: (703) 751-7290 Fax: (703) 751-8171 E-mail: rwiles@dgis.dtic.dla.mil
The Netherlands Congress Centre, The Hague, THE NETHERLANDS		United States Naval Academy Annapolis, MD	
May, 1995		June 6-8, 1995	
Comdef '95	IDEEA Inc. 6233 Nelway Drive McLean, VA 22101-3141 Tel: (703) 760-0762 Fax: (703) 760-0764	Defense Treaty Inspection Readiness Program National Seminar for Industry	On-Site Inspection Agency/DXT Attn: Sandra Hill
Arlington, VA		BDM Facility Tysons Corner, VA	300 West Service Road Dulles International Airport P.O. Box 17498 Washington, DC 20041-0498 Tel: (800) 283-2182 Fax: (703) 318-3589
May 2-3, 1995		June 6-9, 1995	
Annual Industry Briefing on Modeling and Simulation	National Security Industrial Association Attn: Peter Carellas 1025 Connecticut Ave., N.W., Suite 300 Washington, DC 20036 Tel: (202) 775-1440 Fax: (202) 775-1309	3rd Annual Symposium on Atomic Force Microscopy and Scanning Tunneling Microscopy	U.S. Army Natick RD&E Center Attn: Samuel Cohen or Mona Bray
Radisson Plaza Hotel Alexandria, VA		U.S. Army Natick Research, Development & Engineering Center Natick, MA	Natick, MA 01760-5020 Tel: (508) 651-4578 (Cohen) (508) 651-4705 (Bray) Fax: (508) 651-5104
May 15-18, 1995			
1995 Global Demilitarization Symposium & Exhibition	American Defense Preparedness Association (ADPA) Attn: Maureen O'Malley 2101 Wilson Blvd., Suite 400 Arlington, VA 22201-3061 Tel: (703) 247-2572/2571 Fax: (703) 522-1885		
Stouffer Concourse Hotel St. Louis, MO			

Date/Name/Location



Contact(s)

June 11-16, 1995

The Fifth International Symposium on
Protection Against Chemical and
Biological Warfare Agents

Stockholm, SWEDEN

CBW Protection Symposium
FOA NBC Defence
S-901 82 Umeå
Sweden
Tel: 46 90 106602
Fax: 46 90 106801

June 19-22, 1995

DNA's 4th Annual International
Conference on Controlling Arms

Wyndham Franklin Plaza Hotel
Philadelphia, PA

Center for Verification Research
Attn: Richard S. Soll or
Elizabeth A. Loughney
8500 Cinder Bed Road
P.O. Box 1148
Newington, VA 22122
Tel: (703) 550-6801/5424
Fax: (703) 550-1986

July 11, 1995

DTIC Regional Conference

Old Colony Inn-Old Town
Alexandria, VA

DTIC
Attn: Ms. Patti Miller
Cameron Station
Alexandria, VA 22304-6145
Tel: (703) 274-3848
DSN: 284-3848
E-mail: pmiller@dgis.dtic.dla.mil

July 11-12, 1995

Third ARDEC Simulation and
Modeling Symposium

Piscataway, NJ

American Defense Preparedness
Association (ADPA)
2101 Wilson Blvd., Suite 400
Arlington, VA 22201-3061
Tel: (703) 247-1820

Sept 4-8, 1995

Royal Navy and British Army
Exhibition

Aldershot, UNITED KINGDOM

Defence Export Services
Organisation
MDS 3 Exhibitions
Room G01
Stuart House
Soho Square
London, UK
Tel: 44 71 305 4468
Fax: 44 71 305 4441

Sept 17-20, 1995

Emerging Technologies in Hazardous
Waste Management VII

Stouffer's Waverly Hotel and
Cobb Galleria
Atlanta, GA

American Chemical Society
(Industrial and Engineering
Chemistry Division)
c/o Meeting Makers
P.O. Box 70096
Marietta, GA 30007-0096
Tel: (404) 894-2856
Fax: (404) 894-2866

Sept 17-20, 1995

International Society for
Respiratory Protection
6th Conference

Hyatt Regency Vancouver
Vancouver, British Columbia,
CANADA

Lawrence Livermore
National Laboratory
Attn: James S. Johnson, L-379
ISRP conference
7000 East Avenue
P.O. Box 808
Livermore, CA 94550

Date/Name/Location

Contact(s)

Sept 20-23, 1995

IDEF '95 2nd International Defence
Industry and Civil Aviation Fair

Erimesgut - Turkusu Turkish
Air League Airport Facilities
Ankara, TURKEY

Tüyap Fairs and Exhibitions
Organization, Inc.
Tel: 90 0212 211 67 04
Fax: 90 0212 267 16 81

Oct 16-18, 1995

Association of the United States
Army (AUSA) Exhibition

Washington, DC

AUSA
2425 Wilson Blvd.
Arlington, VA 22201
Tel: (703) 841-4300, Ext. 660
Fax (703) 252-9039

Oct 31 - Nov 1, 1995

Tank Automotive Command
(TACOM) APBI

Dearborn, MI

American Defense Preparedness
Association (ADPA)
Attn: Col. Ira Click
2101 Wilson Blvd., Suite 400
Arlington, VA 22201-3061
Tel: (703) 247-2573

Oct 31 - Nov. 3, 1995

COPEX UK

Sandown Exhibition Center
Esher, Surrey, UNITED KINGDOM

COPEX International Ltd.
33 A Church Road
Watford, Herts, WD1 3PY
United Kingdom
Tel: 44 923 819 301
Fax: 44 923 818 927
Compuserve: 100010.3545

1996 MEETINGS

Jan TBD, 1996

AUSA 8th Annual Winter
Exposition

Orlando, FL

Association of the United States
Army (AUSA)
2425 Wilson Blvd.
Arlington, VA 22201
Tel: (703) 841-4300, Ext 660
Fax: (703) 252-9039

June 24-29, 1996

Eurosatory '96
Land Defence Equipment

Paris-Le Bourget, FRANCE

GICAT
Comissariat Générale
Eurosatory
64 rue Ramelagh
75016 Paris France
Tel: 33 1 42 30 71 11
Fax: 33 1 42 30 70 88

Sept, 1996

Night Vision '96

London, UNITED KINGDOM

Shepherd Conferences
111 High Street
Burnham, Bucks SL1 7JZ
United Kingdom
Tel: 44 628 604746
Fax: 44 628 664075

Upcoming Arms Control Meetings in 1995

May TBD	NATO North Atlantic Council Ministerial Meeting The Netherlands
June 14-18	Fourth Russian American Entrepreneurial Workshop on Defense Technology Conversion Arzamas-16 Russian Federation
Dec. TBD	NATO North Atlantic Council Foreign Ministers Meeting Brussels
Dec. TBD	NATO Defense Planning Committee and Nuclear Planning Group (Defense Ministers) Brussels

Ongoing and Recent Activities

Continued From Page 2

- 9 Analyze Critical Performance and Technical Requirements and Conduct Technology Assessments for USN Advanced and Engineering Development Model CBR-D Systems.
USN/NAVSEA
- 14 Produce and Publish a Sourcebook which Lists Manufacturers of CWC Schedule 1, 2 and 3 Controlled Items in Selected Countries.
GOVERNMENT
- 15 Conduct a Market Survey of Current and Developmental NBC Items Applicable for Use on a Combat Vehicle.
USA/ERDEC
- 17 Identify and Analyze the Possible CBW Production Capabilities of Selected Countries.
GOVERNMENT
- 18 Evaluate BW Agent Point Detection Technologies and Associated Systems.
USN/NSWC

- 19 Evaluate, Analyze and Assess USAF NBC R&D Technical Documentation Including Operational Requirements, Test and Evaluation Plans, Design Requirements, etc.
USAF/HSC
- 20 Continue Evaluation of the Feasibility of Field Decontamination of Contaminated Saratoga Garments.
USAF/HSC
- 21 Catalog Citations for CB Related Technical Reports found in the CBDCOM Technical Library.
DTIC
- 22 Identify and Technically Evaluate Chemical Detection and Monitoring Equipment Capable of Sensing Low Level Chemical Agents in Contained Spaces.
USA/ERDEC
- 27 Maintain and Update the CW Treaty Reference Collection, Analyze Information Pertaining to the DNA CBW Verification Program, and Assess the Prototype Immunochemistry Kit.
DNA/OPAC
- 28 Provide Technical, Engineering and Program support in all areas of NBC Defense.
USA/NRDEC
- 29 Assist ERDEC with the Establishment of a CB Modeling and Simulation Focal Point.
USA/ERDEC
- 32 Evaluate ASM Smoke and Evaluation Test Data and Develop Test Procedure and Smoke Generator Capabilities Documentation.
USA/ERDEC
- 36 Evaluate the Filtration Efficiency of HEPA Filters Against a Bioaerosol Challenge.
USA/ERDEC
- 38 Assess Air Sampling Capabilities Worldwide and Prepare a Protocol for Recovery and Identification Biological Material from Air Samplers.
USA/ERDEC
- 447 Analyze Possible Operational and Employment Concepts for USAF Use of Chemical Warfare Agent Detectors.
USAF/HSC
- 467 Evaluate, Analyze and Assess Requirement, Technologies, Systems Testing Programs and Documentation Associated with the USAF NBC Defense Program.
USAF/HSC
- 481 Evaluate Potential of Filtration and Conformal Coating Technologies to Protect Military Systems from Damage by Smoke and Obscurants.
USN/NSWC
- 485 Evaluate Aerosol Protection Provided by the JSLIST Groundcrew CBW Agent Protective Uniform Final Designs.
USAF/HSC

CBIAC STATISTICS

Total CBIAC documents accessible through DTIC DROLS: 6,544

Shared¹: 3,694 Unique²: 2,850

Total DTIC DROLS documents during Second Qtr. FY95:

Acquired: 233
Reviewed: 14
Cataloged: 13

Total document citations available through the CBIAC UDB: 44,403

Total documents on site: 22,899

Total inquiries received during Second Qtr. FY95: 262

Technical: 49
Informational: 69
Bibliographic: 136
Referral: 8

Total TATs awarded³: 23

Completed: 0 Ongoing: 23

Total newsletter subscribers: 2,161

- 1 Existing DTIC records appended with CBIAC terms
2 New DTIC records created by the CBIAC
3 Sum of TATs and new CBIAC contract

CB R&D ACTIVITIES

JOINT SERVICE LIGHT- WEIGHT INTEGRATED SUIT TECHNOLOGY I (JSLIST I)



The four services have integrated their protective clothing item development efforts for CB protective suits, boots and gloves into a joint service program, JSLIST I, in an attempt to standardize protective items amongst all services. JSLIST I consolidates all service programs to develop these next generation CB clothing items into common goal objectives:

- Obtain best items possible at least cost.
- Minimize types of items in service.
- Maximize economies of scale.
- Conserve service resources.

There are numerous protective clothing items being developed for all four services as follows:

- **Protective Suits:** Six joint requirements all services, seven users.
- **CB Undergarments:** One joint requirement, Army and USMC, four users.
- **CB Overboots:** One joint requirement all services, eight users.
- **CB Gloves:** One joint requirement all services, eight users.

The objective of the JSLIST I Program is to identify new, state-of-the-art protective materials and concepts, for lightweight suits, boots, and gloves and to integrate them into an improved CB protective ensemble to enhance the protection of U.S. Forces while minimizing heat stress and

mission performance degradation in a MOPP IV Protective Posture. The purpose of JSLIST I is to demonstrate advanced technologies for field CB agent protective clothing items that will provide protection against current and future threats with reduced heat stress and logistical burden. More specifically, JSLIST I will acquire data on durability, CB agent liquid, vapor and aerosol protection, flame resistance, heat stress, and launderability on advanced improved materials that can be used as platforms for technology insertions/upgrades for continually meeting the four services operational requirements for a range of CB protective clothing items. The execution of JSLIST I is being conducted in two phases. Phase I involved preliminary wear tests, material tests (chemical agent, aerosol, flame resistance, heat stress and physical properties) concurrently with suit, boot and glove design development efforts. Phase I concluded with material and suit/ boot/glove design "downselect". Phase II will be comprised of joint service ensemble and component Developmental Test and Operational Test (DT/OT). Data will be collected on ensemble and component performance in areas of CB protection, durability, human factors, aerosol protection, flame resistance, heat stress, user acceptability and operational compatibility. Phase II will conclude with service selection of next generation items/materials for First Unit Equipped (FUE) Production.

The final decisions regarding the materials/ technologies into which the various ensemble items will be adopted and subsequently procured, will be based on all joint service data collected during comprehensive component and system level testing; material swatch chemical agent penetration and penetration (after the required days of wear), aerosol, flame resistance, heat stress (thermal manikin, environmental, and field testing), launderability, etc. A statistically sufficient test matrix has been jointly developed to fully characterize the overall performance of the optimum candidate(s) relative to joint service requirements and standard items (i.e. USMC -Saratoga, Army - BDO and CPU and Navy - CPOG) as baseline controls.

For further information on the JSLIST I program contact:

Mr. Doug Bryce, MARCORSYSCOM
(703) 640-4278

Mr. Chuck Gidley, PM-Soldier
(703) 704-3816

Mr. Stan Enatsky, NAVSEA
(703) 602-2980

Mr. Al Frechette, Brooks AFB
(210) 536-4731

Mr. John Smith, Battelle Columbus
(614) 424-5392

Mr. Bill Henry, Battelle Stafford
(703) 720-6098

Mr. Don Schamber, Battelle Natick
(508) 647-1972

To Place an Ad in CBIAC News...

The CBIAC is now accepting paid advertisements from the chemical and biological defense community. Our general policy is to include ads pertaining to scientific and engineering equipment and services and other commodities generally related to the mission and scope of the CBIAC. All advertisements are subject to approval by our COTR before being printed. If you would like to run an ad, please contact Judy Shetterly for additional information on price and policy

SELECTED TECHNICAL RESPONSES

This section of the newsletter contains selections of recent technical inquiries and responses on subjects we feel are of interest to our users. The information presented has been edited to conserve space. If you would like further detail, please contact Steven Jones at the CBIAC and reference the number indicated in parentheses.

Q: *What is the current status of the regulations dealing with NBC Survivability, and in particular Chemical Survivability? (Reference: 95-0292)*

A: *Dr. Bill Magee, Product Manager for NBC Survivability in the Executive Office of the Joint Service Materiel Group (JSMG), provided the CBIAC with this update.*

- DoDD 5000.1, Department of Defense Directive - Defense Acquisition - Essentially unchanged, but some revisions have shown up in day-to-day directives.

- DoDI 5000.2, Survivability Considerations at Milestone Decision Points - Several revised pages have been issued, none of which deal with NBCCS specifically.

- AR 70-1 (Army version of DoDD 5000.1) - Exists and identifies Commander, CBDCOM as proponent for NBCCS.

- AR 70-71, Nuclear, Biological, and Chemical Contamination Survivability of Army Materiel - No longer exists. It has been superseded by AR 70-75 which addresses survivability of Army personnel and materiel from all threats, not just NBCCS as was the case with AR 70-71. AR 70-75 reinforces that

Commander, CBDCOM is the proponent for NBCCS.

- DA PAM 70-XX (presumably 70-2) (the Army version of DoDI 5000.2) - Still being revised. Publication date is uncertain.

- DA PAM 73-1 on Test & Evaluation - Being revised to include a section on NBCCS Publication date is uncertain.

- Test Operations Procedure (TOP) 8-2-111, NBC Contamination Survivability, Small Items of Equipment and TOP 8-2-510, NBC Contamination Survivability, Large Item Exteriors - Exist for small and large items, respectively.

- AR 71-9, Materiel Objectives and Requirements - Deals with requirements documents and is being revised to be in line with DoDD 5000.1, but publication date of the revision is uncertain.

- AR 380-86 - Covering classification guidance for NBCCS matters is being revised. Publication date is still uncertain.

- The Combined Battlefield Environmental Effects (CBEE) is up and running as an OSD initiative, it is still too premature to say more.

- QSTAG 747, (Edition 1) NBCD: Contamination Survivability Criteria for Military Equipment - Exists and an effort to have a similar NATO STANAG is underway. At least one other QSTAG dealing with NBC mitigation is being drafted.

- The Navy is using SECNAVINST 3400.2 as its version of DoDI 5000.2.

- The Air Force has issued Air Force Instruction (AFI) 62-201.

RON HALE APPOINTED IAC PM

Mr. Ron Hale was recently appointed Program Manager for the Department of Defense Information Analysis Centers (IAC), which are sponsored by the Defense Technical Information Center, Cameron Station, Alexandria, VA. Mr. Hale has been associated with the Department of Defense for over 30 years and has a Bachelor of Science degree in Engineering Management and Masters of Business Administration. He resides in the Blue Ridge Mountains with his family.

Product and Services Evaluation

Many thanks to the readers who returned the Products and Services Evaluation. We appreciate your feedback, compliments and comments. If you have not yet returned the evaluation, please take a moment to do so. We use your feedback to determine future products.

Just a reminder, if you provide your phone number for future contact, please remember to fill in your name and organization in the return address section.

CONTRACT AWARDS

1. *Engineering Support for Development of Chemical and Biological Warfare (CBW) Agent Detection Systems.*
N00178-95-D-3013
Sentel Corporation
225 Reiniekers Lane
Suite 500
Alexandria, VA 22314
\$2,835,403.00. 10 March 1995
2. *M18A2 Chemical Detector Kit.*
DAAE2095C0061/N/A
Truetech Inc.
680 Elton
Riverhead, NY 11901-2585
\$539,370. 6 January 1995
3. *Chemical and Biological Optical Insert*
Wilson Products Division
2nd and Washington Streets
Reading, PA 19603
\$74,679. 16 December 1994
4. *Vaccine and Biological Reagent Production Facility*
Salk Institute for Biological Studies
P.O. Box 85800
San Diego, CA 92138-9216
\$3,855,458. 30 December 1994
5. *To Provide Task Order Services in Support of USAMRIID's Inhouse Research Efforts*
Organon Teknika/Biotechnology Research Institute
1330 Piccars Drive
Rockville, MD 20850-4396
\$2,053,473. 30 December 1994
6. *Automatic Continuous Air Monitoring Systems (AC-AMS)*
ABB Process Analytics
P.O. Box 831
Lewisburg, WV 24901
\$180,000. 10 January 1995.
7. *Chemical and Biological Agent Neutralization Criteria*
Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201-2693
\$1,294,987. 18 January 1995.

8. *Biological Air Sampler*
New Brunswick Scientific Company
44 Talmadge Road
Edison, NJ 08818
A sole source contract for 20 Biological Air Samplers, Model STA-203, Part No. M1075-1000. Supplies and services and/or equipment are available from this one responsible source and no other source will satisfy the requirements.
9. *Chemical Encapsulating Suits (CW Agent Approved)*
Interspiro Inc.
31 Business Park Drive
Branford, CT 06405
A sole source contract for 38 chemical encapsulating suits, DA Safety Office approved, Trelchem models HPS and HPS/TS (modified).

DRILL HELD IN NEW YORK CITY

The New York Times reported on March 26th that an all-day drill for a simulated toxic agent attack was held. The hypothetical situation in New York city involved the organism bacillus anthracis and contamination of the city's food and water supply. The drill was part of efforts to counter terrorist attacks similar to the incident in Tokyo involving chemical and biological warfare agents. Charles DeGaetano, an Emergency Medical Services spokesman, said that workers in the city's EMS have special body suits and masks to protect against toxic exposure. The city has strengthened alliances with agencies such as the Federal Bureau of Investigation and the Federal Emergency Management Agency in hopes of increasing preparedness. Plans include a survey of hospitals, pharmacies, and health agencies to determine the availability of antidotes including atropine injectors and 2-PAM. Contacts with 24-hour laboratories able to quickly and accurately identify a toxic agent are also critical in handling such an emergency. Once a diagnosis of the agent was made, hospitals would receive faxes to alert them and advise on treatment needs of the victims. The EMS system regularly conducts "several" disaster drills which focus on "how to get...people to safety as soon as possible."

RIBBON CUTTING CEREMONY FOR NEW DTIC ELECTRONIC DOCUMENT MANAGEMENT SYSTEM

A ribbon cutting ceremony for the new Electronic Document Management System (EDMS) was held at the Defense Technical Information Center (DTIC) on February 22, 1995, and attended by approximately 30 invited guests and 20 DTIC employees. Dr. Lance Davis, Deputy, Technology Transition, and Mr. Kurt Molholm, DTIC Administrator, officially opened the new EDMS. The system became operational on December 1, 1994, and provides smooth document processing from receipt and selection of documents, optical character recognition (OCR) of the SF298, document preparation and document imaging, quality control, cataloging, indexing and abstracting, production of microfiche for archiving, and availability for document distribution.

DTIC is currently processing all unclassified contributors' documents in this manner. The copies are clean, clear, and tape-bound rather than stapled. Phase 2, in FY 95 will provide further enhancements such as on-line tools for analysts, the ability to receive electronic input, scanning of microfiche, search interface for internal users, incorporation of the automatic document distribution (ADD) and current awareness bulletin (CAB) programs, and the processing of classified documents. In Phase 3, scheduled for FY 97, the addition of a multi-level security, search interface for external users, full-text indexing/retrieval, integration of Independent Research and Development (IR&D) and Work Unit Information System (WUIS) databases, and electronic delivery will be added.

A demonstration of the EDMS was provided to the attendees at the ribbon cutting ceremony. The system is clearly making the job of document processing at DTIC more efficient. This efficiency is passed on to DTIC's customers in the form of a better product and more timely delivery.

**CBIAC (CHEMICAL WARFARE/CHEMICAL AND BIOLOGICAL
DEFENSE INFORMATION ANALYSIS CENTER)**

The CBIAC NEWSLETTER is a quarterly publication of the Chemical Warfare/Chemical and Biological Defense Information Analysis Center (CBIAC). The CBIAC is a Department of Defense (DoD) Information Analysis Center (IAC), administratively managed by the Defense Technical Information Center (DTIC) under the DoD IAC Program. The Contracting Officer's Technical Representative is Mr. Joseph Williams. He may be reached at:

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Internet: jdwillia@apgea.army.mil.



Government agencies and private industry under contract to the Department of Defense can contact the CBIAC which serves as a center for the acquisition, compilation, analysis and dissemination of information relevant to chemical warfare and chemical and biological defense technology. The CBIAC staff is available to answer questions from 7:00 a.m. to 5:00 p.m, EST.

The CBIAC is located in Building E3330, Aberdeen Proving Ground-Edgewood Area, Maryland 21010.

The CBIAC mailing address is shown below:

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CBIAC NEWSLETTER

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Judi M. Shetterly	Circulation

COLUMN EDITORS

Nancy R. Brletich	Calendar of Events, CB News Excerpts and Product Announcements
Steven A. Jones	CB R&D Activities and Selected Technical Responses
Donald B. McGonigle	TAT Focus and Technology Transfer
Jeanne M. Rosser	Contract Awards
Jennifer L. Shusko	CB News Excerpts
Mary Jo Waters	Ongoing and Recent Activities

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